# Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of:	)	
Applications of CHARTER COMMUNICATIONS,	)	
INC., TIME WARNER CABLE INC., and	)	WC Dkt. No. 16-197
BRIGHT HOUSE NETWORKS, LLC for Consent To	)	
Assign or Transfer Control of Licenses and	)	
Authorizations	)	

## INDEPENDENT COMPLIANCE OFFICER'S FIRST REPORT ON CHARTER'S COMPLIANCE WITH MERGER CONDITIONS

**JANUARY 31, 2017** 

Hon. Barbara S. Jones (Ret.) BRACEWELL LLP 1251 Avenue of the Americas New York, NY 10020

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## **INTRODUCTION**

On May 10, 2016, the Federal Communications Commission ("FCC" or "Commission") issued an order (the "Merger Order") approving the merger of Charter Communications, Inc. ("Legacy Charter"), Time Warner Cable Inc. ("Legacy TWC"), and Advance/Newhouse Partnership ("Legacy Bright House") (as a combined entity, "Charter" or the "Company"), subject to certain conditions (the "Conditions"). (Mem. Op. & Order, MB Dkt. No. 15-149, FCC 16-59, May 10, 2016.) The Conditions are set forth in Appendix B of the Merger Order. To monitor and assess the Company's compliance with the Conditions, Appendix B requires Charter to engage an Independent Compliance Officer ("ICO"). (App'x B § IX(3).) The ICO's duties include preparing and submitting reports that detail the Company's efforts to satisfy the Conditions. (App'x B § IX(3)(e).) The ICO is to submit such reports within sixty days of receiving the periodic reports filed by the Company pursuant to the Conditions. (App'x B § IX(3)(e).)

On August 17, 2016, the FCC identified the Honorable Barbara S. Jones (ret.) as the ICO. (Pub. Notice, WC Dkt. No. 16-197, DA 16-936.) Members of the ICO's firm, Bracewell LLP, and consultants at Guidepost Solutions, LLC are working at the ICO's direction to assist her in the performance of her duties.

On October 14, 2016, Charter filed a report pursuant to the Settlement-Free Interconnection Condition (the "Interconnection Condition"); on November 16, 2016, Charter filed reports pursuant to the Residential Build-Out Condition (the "Build-Out Condition"), and the Data Caps and Usage Based Pricing Condition (the "Data Caps Condition"); and on January 11, 2017, Charter filed an additional report pursuant to the Interconnection Condition. On December 22, 2016, the FCC approved the ICO's request to submit her compliance reports

regarding Charter's October and November filings together on January 31, 2017. (Letter, WC Dkt. No. 16-197, DA 16-1441.) The ICO has elected also to include her observations regarding Charter's January 11, 2017 Interconnection submission in the January 31, 2016 report.

Accordingly, this First Report of the ICO addresses Charter's October 14, 2016; November 16, 2016; and January 11, 2017 filings regarding the Build-Out, Data Caps, and Interconnection Conditions.

## **EXECUTIVE SUMMARY**

Based on the ICO's assessment of information Charter has presented to the ICO, interviews the ICO has conducted of Charter employees, and the ICO's review of documents and materials, it appears that Charter is in compliance with the Build-Out, Data Caps, and Interconnection Conditions of the Merger Order. However, as discussed below, certain reporting requirements are still in progress. Further, the ICO's evaluation of Charter's compliance remains in its early stages. The ICO continues to gather information and materials to learn about Charter's systems, and the ICO intends to begin conducting field tests to independently verify Charter's compliance with the Conditions.

The remainder of this report proceeds in two parts. The first part describes the methodology employed by the ICO to assess Charter's compliance with the Conditions; the second part sets forth the ICO's observations and recommendations regarding Charter's compliance with each of the Interconnection, Data Caps, and Build-Out Conditions. As will be discussed below, the ICO has two primary recommendations at this juncture: (1) that Charter develop more robust documentation of the actions it has taken with respect to the Conditions in order to ensure its compliance and to aid the ICO's examination; and (2) that Charter devote additional resources to addressing the Conditions as the ICO begins field testing.

## **METHODOLOGY**

The ICO's monitoring activities began with two kick-off meetings: one on September 14, 2016 in Washington, D.C., and one on September 26, 2016 in Stamford, CT. Both involved the FCC, Charter, and the ICO. The September 14, 2016 meeting facilitated introductions among the parties and allowed all involved to present their expectations for successful satisfaction of the Conditions. The September 26, 2016 meeting addressed the Conditions in depth. At that meeting, Charter made a full-day presentation to the ICO covering (1) background information on the architecture of cable delivery systems and Charter's operations, and (2) Charter's understanding of the Conditions and its plans to meet their terms. The presentation was led by Charter's Company Compliance Officer ("CCO"), [BEGIN HIGHLY

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**INFORMATION**], and was attended by senior Charter personnel, Charter's technical experts, and Charter's outside counsel, all of whom contributed to the presentation and responded to questions raised by the ICO and her staff.

With an understanding of Charter's approach to satisfying each of the Conditions, the ICO created a work plan. Although the work plan is Condition-specific, for each Condition it involves the same fundamental process:

- 1) Provide Charter with information requests to obtain materials relevant to Charter's implementation and satisfaction of the Condition;
- 2) Conduct interviews of the Charter personnel involved in implementing the Condition, beginning with personnel with overall project responsibility;
- 3) Review documents produced in response to the ICO's information requests and analyze those documents with the help of experts, if necessary;
- 4) Analyze Charter's filed reports in light of the information the ICO has received or obtained regarding Charter's processes and procedures based on documents and interviews; and

5) Conduct field visits as necessary to independently validate Charter's reported data. The process is intended to be iterative. When interviews reveal the existence of additional relevant materials, the ICO transmits follow-up information requests to Charter. And when documents give rise to further questions, the ICO contacts Charter personnel for more information.

Consistent with this work plan, on October 6, 2016, the ICO provided Charter with its first set of requests for documents and information. In that first set of requests, the ICO asked Charter for twenty-seven separate categories of materials related to the Conditions in the Merger Order. On October 17, 2016, Charter and the ICO conferred telephonically regarding the ICO's requests, and Charter began rolling production to the ICO on October 21, 2016. The ICO reviewed Charter's materials as they arrived and began interviewing Charter personnel about the Conditions on November 9, 2016.

At the same time, the ICO undertook to learn about Charter's overall compliance systems. The ICO began by analyzing the Implementation and Compliance Plan ("ICP") drafted by Charter and delivered to the ICO on September 16, 2016. The ICO then conducted an interview of the CCO at the ICO's offices in New York on October 27, 2016. At that interview, the ICO focused primarily on learning about the compliance structure that exists within Charter in connection with the Conditions—including the role of the Executive Steering Committee ("ESC") and the Operational Steering Committee ("OSC")\(^1\)—and how the CCO plans to fulfill her duties.

<sup>&</sup>lt;sup>1</sup> Included among the ICO's document requests is a request for minutes of the ESC and OSC meetings. Charter has provided limited excerpts of those meeting minutes to the ICO. Charter maintains that the remainder of the minutes are subject to attorney-client privilege. Because the OSC and ESC meetings are the primary form of senior management oversight of Charter's handling of the Conditions, the ICO has requested that if Charter is going to

Finally, in addition to the methodologies employed above, the ICO monitors public information related to Charter that could impact its compliance with the Conditions. Toward that end, the ICO conducts regular reviews of news and industry sources for reports concerning Charter, scans Charter's filings with the Securities and Exchange Commission, and follows any ongoing litigation involving Charter that could have implications for the Conditions.

## **COOPERATION WITH THE ICO**

Charter has been very cooperative with the ICO and her staff. When the ICO was first appointed, Charter's CCO put tremendous effort into providing the ICO with information related to the various issues and complexities involved in the merger and the Conditions as well as industry background. Additionally, the CCO has been readily available to the ICO and has made every effort to accommodate the ICO's requests.

## **COMPLIANCE WITH MERGER CONDITIONS**

As set forth above, Charter is in compliance with the Build-Out, Data Caps, and Interconnection Conditions, with the exception of two of the reporting requirements related to the Build-Out that are under consideration. The ICO's observations and recommendations regarding each of the Conditions are set forth in detail below. These observations and recommendations represent the ICO's initial assessment of Charter's compliance; the ICO's assessment will continue to be shaped by additional materials received and interviews conducted in the months and years to come.

#### I. BUILD-OUT CONDITION

#### A. STATEMENT OF THE CONDITION

1. <u>Introduction</u>. The Applicants have offered to invest in residential broadband facilities. The purpose of this Condition is to ensure the promised public

continue asserting privilege with respect to the meeting minutes, Charter find an alternate way to give the ICO visibility into the Company's oversight of its compliance efforts.

benefits as a result of such investment will inure to consumers. This Condition also provides an opportunity for increased competition from services that rely on wired BIAS to deliver video by creating more customer locations or more service options that can receive higher speed broadband service.

#### 2. Condition.

- a. Within five (5) years of the Closing Date, in accordance with the timing requirements set forth in subparts 2.a.(i) through 2.a.(v) below and the composition requirements in subpart 2.b, the Company shall pass, deploy and offer BIAS capable of providing at least a 60 Mbps download speed to at least 2 million additional mass market customer locations,<sup>2</sup> such as those occupied by residences, home offices, and very small businesses (and excluding locations occupied by large enterprises and institutions other than schools and libraries), than the Company passes as of the monthly Closing Date for each Applicant for the month prior to which the Closing Date occurs:
  - i. By twelve (12) months after the Closing date the Company shall expand its Broadband Internet Access Service to at least 150,000 of the aforementioned customer locations;
  - ii. By December 31, 2017, the Company shall expand its Broadband Internet Access Service to at least 400,000 of the aforementioned customer locations;
  - iii. By December 31, 2018, the Company shall expand its Broadband Internet Access Service to at least 800,000 of the aforementioned customer locations:
  - iv. By December 31, 2019, the Company shall expand its Broadband Internet Access Service to at least 1.2 million of the aforementioned customer locations:
  - v. By December 31, 2020, the Company shall expand its Broadband Internet Access Service to at least 1.6 million of the aforementioned customer locations; and
  - vi. Within five (5) years of the Closing Date the Company will complete the aforementioned deployment to all 2 million customer locations.
- b. The aforementioned 2 million additional mass market customer locations shall include at least 1 million mass market customer locations (hereinafter "out-of-footprint locations") where:
  - i. at least one other BIAS provider offers, before or within 12 months of the Company's deployment at such location, 25 Mbps or faster advertised service in the downward direction to the

<sup>&</sup>lt;sup>2</sup> For purposes of this Order and these Conditions, "customer locations" exclude enterprise customers and broadband-connected locations such as gates, ATMs, and elevators.

same mass market customer location; and

- ii. the customer location is in an area where the Company does not have existing facilities as of the Closing Date.
- c. A mass market customer location is passed for purposes of this Condition where the Company does, or could, within a typical service interval (7 to 10 business days), without an extraordinary commitment of resources, provision two-way data transmission to and from the Internet capable of a download speed of at least 60 Mbps.
- d. A mass market customer location is considered to be in an area where the Company does not have existing facilities as of the Closing Date under subpart 2.b.ii. when it is located in a census block that the Applicants did not list as a census block in their respective December 2015 Form 477 filings (including corrective filings submitted as of the Closing Date) in which the Company did, or could have, within a typical service interval (7 to 10 business days), without an extraordinary commitment of resources, provision two-way data transmission to and from the Internet.
- e. The Commission's Office of General Counsel will also credit newly passed mass market customer locations in other census blocks as being in an area where the Company does not have existing facilities as of the Closing Date if the Company demonstrates that:
  - i. the newly passed mass market customer location lies beyond the Company's nodes deployed as of the Closing Date; and
  - ii. the nodes deployed as of the Closing Date are incapable of supporting 60 Mbps service in the downward direction to the newly passed mass market customer location because the nodes deployed as of the Closing Date are located too far from the newly passed mass market customer location to make 60 Mbps service possible (but not if this inability is due to the nodes' capacity or density limitations or where node-splitting would enable the provision of 60 Mbps service in the downward direction from the location of any node deployed as of the Closing Date).
- f. The Company may not use, receive, or request any Connect America Funds ("CAF") for the investments required to satisfy, in whole or in part, the deployment of the additional 2 million mass market customer locations required under this buildout Condition or for operating expenses for such locations after such are deployed. Specifically, 2 million geocoded locations reported for purposes of these Conditions cannot be counted towards satisfying any CAF requirements.<sup>3</sup>

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<sup>&</sup>lt;sup>3</sup> This would include but is not limited to any of the Connect America Fund ("CAF") programs, as well as any other Universal Service Fund ("USF") programs that the Commission may implement at a future date.

- The Company may not use the acquisition of other BIAS providers to satisfy, in whole or in part, the deployment of the additional 2 million mass market customer locations required under this Condition, except that for mass market customer locations that would otherwise qualify as out-of-footprint locations, the Commission will credit no more than 250,000 mass market customer locations towards the out-of-footprint locations requirement of subpart 2.b. when the Company acquires BIAS providers and upgrades them to 60 Mbps or faster service in the downward direction if the relevant passings of those BIAS providers meet the following requirements at the time of purchase: (i) they are not capable of providing speeds of at least 25 Mbps in the downward direction; (ii) they compete against one or more wireline BIAS providers offering at least 25 Mbps in the downward direction; and (iii) they would be unlikely to be upgraded by the acquired BIAS provider to offer 60 Mbps or faster service in the downward direction by 2020 due to technical or financial limitations.
- 3. Reporting. The Company shall submit a report in accordance with the filing and service requirements set forth in Section IX.5 herein on a semi-annual basis that describes its compliance with this Condition, with the first such report to be submitted six (6) months after the Closing Date in a format and containing data fields approved and/or selected by the Commission's Office of General Counsel, which shall include at least the following, in electronic format:
  - a. The number of additional new mass market customer locations to which Broadband Internet Access Service has been deployed on a monthly basis during the reporting period ending as of June 30 for reports submitted in the second half of each year and ending as of December 31 for reports submitted in the first half of each year;
  - b. The number of additional new out-of-footprint locations to which Broadband Internet Access Service has been deployed on a monthly basis during the reporting period;
  - c. A CSV (comma separated values) file or other form approved by the Commission staff providing for each location to which Broadband Internet Access Service has been deployed in satisfaction of this Condition, including information identifying:
    - i. for mass market customer locations:
      - (A) latitude and longitude;
      - (B) alternative address and/or location information;
      - (C) unit or apartment identifier where applicable;
      - (D) the date the Company passed the location and began to offer BIAS capable of providing at least a 60 Mbps download speed; and
      - (E) 15-digit census block code;

- ii. additionally for out-of-footprint locations:
  - (A) the identity of the other BIAS provider offering 25 Mbps or faster advertised service in the downward direction to the same mass market customer location;
  - (B) the maximum advertised downstream bandwidth speed that each of the other BIAS providers offer; and
  - (C) if the other BIAS provider begins to offer service after the Company's deployment to the out-of-footprint location, then the date the other BIAS provider began offering or advertising 25 Mbps or faster service in the downward direction;
- iii. additionally for out-of-footprint locations where the Company seeks credit pursuant to subpart 2.e:
  - (A) the location, capacity, and density of all nodes deployed as of the Closing Date within a set radius, to be determined by the Commission's Office of General Counsel, of any new mass market customer location to which BIAS has been deployed or, if there are no such nodes, the closest node deployed as of the Closing Date.
- d. GIS data for the mass market customer locations, the out-of-footprint customer locations, and the nodes required to be identified pursuant to this Condition's reporting requirements;
- e. Any explanatory notes as required;
- f. Any other information the Independent Compliance Officer or the Commission's Office of General Counsel determines is reasonably necessary to report on compliance with this Condition; and
- g. In the first such report, the Company's June 2015 and December 2015 Form 477 filing and the number of existing mass market customer locations as of the Closing Date for each Applicant for the month prior to which the Closing Date occurs where the Company offers Broadband Internet Access Service.
- 4. Enforcement. Failure to comply with this Condition may result in:
  - a. extension of all of the Conditions set forth in this Appendix B until completion of the required buildout;
  - b. a 5% increase in the total number of mass market customer locations that must be passed for each year an incremental target listed in subparts 2.a.(i) through 2.a.(vi) is missed; and
  - c. a 5% increase in the minimum number of out-of-footprint locations that must be passed for each year an incremental target listed in subparts 2.a.(i) through 2.a.(vi) is missed.

(App'x B § V.)

## **B. OBSERVATIONS**

The following are the ICO's observations on (i) Charter's compliance with the Build-Out Condition, and (ii) the contents of Charter's November 16, 2016 semi-annual report (the "Build-Out Report").

## 1. Charter's Approach to Satisfying the Condition

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## a. Construction

As a cable Company, one of Charter's core business activities is deploying its broadband service to new customers. Thus, the Build-Out Condition is entirely consistent with Charter's normal practices. [BEGIN HIGHLY CONFIDENTIAL INFORMATION]

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Some specifics are helpful to illustrate Charter's plan. [BEGIN HIGHLY

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<sup>&</sup>lt;sup>4</sup> [BEGIN HIGHLY CONFIDENTIAL INFORMATION] [END HIGHLY CONFIDENTIAL INFORMATION]

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## **INFORMATION**

With respect to the Build-Out Condition's prohibition on use, receipt, or request of

Connect America Funds ("CAF"), both the CCO and [BEGIN HIGHLY CONFIDENTIAL

INFORMATION] [END HIGHLY CONFIDENTIAL INFORMATION] have

confirmed that Charter has not requested, does not intend to request, and has not used any CAF

funds in connection with the Build-Out Condition or otherwise. [BEGIN HIGHLY

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b. Data

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**CONFIDENTIAL INFORMATION**] The process that team has created to satisfy the Condition's reporting requirements is as follows.

#### i. Definitions

Before addressing the issues of data consolidation and processing, Charter needed to resolve the threshold issue of defining two terms key to the Condition: "passing" and "mass market customer location." The Build-Out Condition provides that a location is passed when Charter "does, or could, within a typical service interval (7 to 10 business days), without an extraordinary commitment of resources, provision two-way data transmission . . . capable of a download speed of at least 60 Mbps." (App'x B § V(2)(c).) [BEGIN HIGHLY CONFIDENTIAL INFORMATION]

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## ii. Data Consolidation

<sup>&</sup>lt;sup>5</sup> [BEGIN HIGHLY CONFIDENTIAL INFORMATION] [END HIGHLY CONFIDENTIAL INFORMATION]

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**CONFIDENTIAL INFORMATION**] This process is illustrated in the following graphic provided to the ICO as part of Charter's September 26, 2016 presentation.

## [END HIGHLY CONFIDENTIAL INFORMATION]

iii. Data Processing

<sup>6</sup> [BEGIN HIGHLY CONFIDENTIAL INFORMATION] INFORMATION]

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<sup>&</sup>lt;sup>7</sup> [BEGIN HIGHLY CONFIDENTIAL INFORMATION] [END HIGHLY CONFIDENTIAL INFORMATION]

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## iv. Quality Assurance

Throughout the data processing and reporting process, Charter engages in a number of quality assurance efforts to validate the Build-Out data it is reporting.

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## **INFORMATION**

## 2. Charter's November 16, 2016 Report

On November 16, 2016 Charter filed its first semi-annual report in connection with the Build-Out Condition (the "Build-Out Report"). As clearly stated on the "FCC Summary" page of the Report, during May and June of 2016, Charter generated [BEGIN HIGHLY CONFIDENTIAL INFORMATION] [END HIGHLY CONFIDENTIAL INFORMATION] new mass market customer passings, [BEGIN HIGHLY CONFIDENTIAL INFORMATION]

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## a. Contents of the November 16, 2016 Report

The vast majority of the data contained in the Build-Out Report is set forth in the "FCC Detail" sheet of the Excel file. For each passing, the sheet contains the data necessary to identify

location—that is, latitude and longitude, house number, lot ID, street name, unit number, city, state, zip code, and census block. It identifies an activation date for each passing—[BEGIN HIGHLY CONFIDENTIAL INFORMATION]

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forth whether each passing is located in a census block previously serviced by Charter. It also lists Charter's maximum advertised download speed for each passing.

Each passing is classified as "Mass Market," "Out-of-Footprint New CB," or "Out-of-Footprint Previously Reported CB." Those passings classified as "Mass Market" are new passings to mass market customer locations that are not out-of-footprint; those classified as "Out-of-Footprint New CB" are new passings to mass market customer locations that are out-of-footprint because they are located in a previously unserved census block; and those passings classified as "Out-of-Footprint Previously Reported CB" are new passings to mass market customer locations that are out-of-footprint because, although they are located in a previously served census block, they required the installation of a new node.

For all locations classified as "Out-of-Footprint New CB" or "Out-of-Footprint Previously Reported CB," Charter has provided a competitor name and the competitor's maximum advertised download speed. Charter has based competitor information on the 477 report data aggregated and released by the FCC. Although Charter includes a column for the date the competitor offered service, because Charter is using 477 report data, that date is always December 31, 2015, the release date of the 477 data Charter used. For "Out-of-Footprint Previously Reported CB" locations, Charter also has included a column titled "Node Name." This column provides the name of the node servicing the listed passing.

The "FCC Node Detail" sheet of the report simply pulls from the "FCC Detail" sheet those passings that are classified as "Out-of-Footprint Previously Reported CB." For those passings, the sheet lists location information and node name. The node name is, once again, the name of the node servicing the passing. Thus, the "FCC Node Detail" sheet is merely a subset of the data presented in the "FCC Detail" sheet.<sup>8</sup>

## b. Overall Assessment of the November 16, 2016 Report

## i. Fields Included

The Build-Out Report satisfies the reporting requirement of the Condition (see App'x B § V(3)) with two exceptions.

#### **Node Data**

The first exception is the node information reported. The Condition requires that for outof-footprint passings in a previously served census block, Charter is to report:

[T]he location, capacity, and density of all nodes deployed as of the Closing Date within a set radius, to be determined by the Commission's Office of General Counsel, of any new mass market customer location to which BIAS has been deployed or, if there are no such nodes, the closest node deployed as of the Closing Date.

(App'x B § V(3)(c)(iii).) As described above, however, for this subset of passings Charter has reported only the name of the node that services the passing. Charter does not report either location, capacity, and density information for all nodes within a set radius of the passing, or the closest node deployed as of the Closing Date.

It is the ICO's understanding that Charter has taken this approach largely because it is still in the process of working with the FCC's office of General Counsel to determine the "set radius" to be used for node reporting. The ICO raised this issue with the FCC and Charter, and

<sup>&</sup>lt;sup>8</sup> This will presumably change once Charter begins reporting node location, capacity, and density data, as discussed below.

the FCC has requested that the ICO work with Charter to develop a proposal for the radius. The ICO has informed Charter of the FCC's request and is working with Charter to formulate a solution. It is worth noting, however, that Charter has expressed some concern that even once the radius is set, complying with this particular reporting requirement will be a significant data challenge given the number of nodes—tens of millions—that Charter operates.

## **Competitor Data**

The second exception is the competitor data provided. Although all required fields for competitor data are present in the report—competitor name, advertised speed, and date competition commenced—the data contained in those fields does not fully satisfy the reporting requirement of the Condition. For a passing to be "out-of-footprint," the Build-Out Condition requires that "at least one other BIAS provider offer[] . . . 25 Mbps or faster advertised service in the downward direction to the same mass market customer location . . . ." (App'x B § V(2)(b)(i) (emphasis added).) The Condition's reporting requirement, in turn, states that for out-of-footprint locations, Charter is to identify "the other BIAS provider offering 25 Mbps or faster advertised service . . . to the same mass market customer location." (App'x B § (V)(3)(c)(ii)(A) (emphasis added).) The ICO reads these provisions as requiring competition to be at the passing level—that is, to be considered an "out-of-footprint" customer location, a broadband provider other than Charter must offer service to the location.

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ICO will continue to track this issue and report on developments.9

## ii. Internal Verification

For this first reporting period, the ICO focused her efforts with respect to the Build-Out Condition on understanding Charter's plans and processes, and on internally verifying the data in the Report. For the next reporting period, the ICO intends to undertake field tests to begin to independently verify Charter's reported data.

To internally verify Charter's data, the checks the ICO performed on the Build-Out Report include the following:

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<sup>&</sup>lt;sup>9</sup> [BEGIN HIGHLY CONFIDENTIAL INFORMATION]

- All passings have a scientifically possible latitude and longitude;
- All passings have either a house number, lot ID, or unit ID;
- All passings have an identified city;
- All passings have a street name;
- All passings have a state;
- All passings have a five digit zip code;
- All passings are associated with a 15-digit census block;
- All passings have an activation date that falls in May or June of 2016;
- There is an indication whether each passing is located in a currently served census block;
- All passings indicate download speed, and all download speeds are greater than or equal to 60 Mbps;
- All passings classified as out-of-footprint list a competitor name;
- All passings classified as out-of-footprint list a competitor download speed greater than or equal to 25 Mbps;
- All passings classified as out-of-footprint indicate that the date the competitor advertised service is before 5/1/2016;
- All passings identified as Out-of-Footprint Previously Reported CB list a node name; and
- All passings are identified as either Mass Market, Out-of-Footprint New CB, or Out-of-Footprint Previously Reported CB.

In conducting these and other similar checks, the ICO encountered a number of minor issues that it asked Charter to examine. Those issues included, for example, a handful of street numbers that did not seem plausible (e.g., 1.6, ?, 000), several street names beginning with "1/2" (e.g., ½ Mesa Ave), a small number of passings containing no street name; and a series of entries with city names that seemed unlikely to be correct. Charter's resolution of each of the issues was satisfactory to the ICO, and did not cause concern that there are any significant, systemic issues. In some cases, there were one-off data entry errors; in others, Charter was able to confirm that the passing information was, in fact, correct; and in one case Charter determined that the passing was not valid and will exclude it from future reports. Additionally, to reduce some of the one-off

data entry issues, [BEGIN HIGHLY CONFIDENTIAL INFORMATION]

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**INFORMATION**] Further, the ICO's inquiry has resulted in Charter including additional checks in its internal quality check process.

## iii. Reliability

Setting aside the ICO's internal verification procedures, there are several features of Charter's approach to reporting on the Build-Out that give the ICO comfort in the general reliability of the data. Most importantly, the data that forms the basis of Charter's Build-Out Report is the data it maintains in the normal course of business in its construction databases. Charter's business relies on those databases, so their accuracy is likely to be of paramount importance to the Company. Additionally, at the outset of the data gathering process, Charter made the decision not to alter the data fields in the legacy construction databases to fit the Build-Out reporting requirements. [BEGIN HIGHLY CONFIDENTIAL INFORMATION]

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INFORMATION] The ICO believes this was a sound decision. [BEGIN HIGHLY CONFIDENTIAL INFORMATION]

[END HIGHLY CONFIDENTIAL INFORMATION] The ICO further appreciates the conscientiousness with which Charter has approached data reporting associated with the Build-Out. The ICO has been impressed by the many quality checks Charter is

conducting on its data at all stages of the gathering, processing, and reporting process, as well as the fact that it has independently opted to engage in field tests for compliance purposes.

#### C. RECOMMENDATIONS

The ICO's recommendations regarding satisfaction of the Build-Out Condition will continue to evolve as the ICO learns more about Charter's processes and procedures, and as the ICO is able to begin to verify Charter's reported data through field checks. At present, however, the ICO has three recommendations with respect to the Build-Out Condition:

Node Data: The node data reported in the Build-Out Report is not fully consistent with the data requested by the Condition. The ICO recommends that Charter continue to work closely with the ICO and the FCC to address the issue.

Competitor Data: The competitor data reported in the Build-Out Report does not comport with the data requested by the Condition. [BEGIN HIGHLY CONFIDENTIAL INFORMATION]

## **[END HIGHLY CONFIDENTIAL**

## **INFORMATION**]

Resources: It appears to the ICO that the CCO is shouldering most, if not all, of the administrative responsibilities associated with compliance with the Merger Order. As the ICO begins field testing, however, she will require significant assistance from Charter in making arrangements for the tests. The ICO recommends that Charter devote additional resources to assist the ICO in evaluating Charter's compliance with the Conditions in light of this expected increase in workload.

\* \* \*

It is worth noting that at this time the ICO has not formed an assessment of the rate at which Charter's Build-Out is proceeding. The Condition does not set a passing count Charter is to have achieved at this time (*see* App'x B § V(2)(a)), [BEGIN HIGHLY CONFIDENTIAL INFORMATION]

## **[END HIGHLY CONFIDENTIAL**

**INFORMATION**] Accordingly, the ICO will continue to monitor Charter's progress and report, but does not make any recommendations regarding build rate at this time.

#### II. DATA CAPS CONDITION

#### A. STATEMENT OF THE CONDITION

- 1. <u>Introduction</u>. We find that as a result of the transaction, the Company will have an increased incentive to discriminate against online video distributors which could have the effect of harming video competition. One manner to limit such access is the imposition of data caps and usage-based allowances at levels intended to blunt competition from online video distributors. The purpose of this Condition is to address the incentive and ability to use data caps and other usage based practices against video content delivered to customers through wired BIAS. The Condition eliminates the risk that that the Company will use its BIAS to engage in practices that favor its own or affiliated video content.
- 2. <u>Conditions.</u> Commencing on the Closing Date, and ending on the seventh anniversary of the Closing Date, or as otherwise adjusted by the Commission under

the terms of this Appendix B, the Company shall not offer any fixed mass market BIAS plans that subject mass market BIAS customers to data caps or any other usage-based pricing mechanisms. Nothing herein shall require the Company to provide, or continue to provide, a residential BIAS plan to a business operating from a property zoned for commercial use (e.g., enterprise customers and restaurants). Usage-based pricing mechanisms include, but are not limited to, the following actions:

- a. charging fixed mass market BIAS customers different prices based on the amount of data consumed;
- b. preventing fixed mass market BIAS customers from consuming data beyond a certain threshold;
- c. imposing additional fees on fixed mass market BIAS customers who consume data beyond a certain threshold;
- d. requiring fixed mass market BIAS customers who have consumed data beyond a certain threshold to upgrade to a higher priced service product, except that this Condition IV.2.d. shall not apply to a fixed mass market BIAS customer who, after an opportunity to discuss with the Company, is reasonably found by the Company to be: 1) not primarily using its BIAS to consume edge provider traffic in the downward direction; and either 2) running a server to upload or exchange large volumes of traffic in a manner that is not consistent with residential use; or 3) using, and/or enabling others to use, a BIAS data plan to operate any type of business or commercial enterprise (indicia of commercial usage include, without limitation, sending and receiving high volumes of symmetrical traffic and not consuming traffic in a typical residential manner where the majority of traffic travels in downward direction); or
- e. impairing or otherwise degrading the speed or quality of the customer's fixed mass market BIAS connection once the customer surpasses a certain data consumption threshold or consumes a certain amount of data.<sup>10</sup>
- 3. Reporting. For the duration of this Condition, the Company shall submit a report in accordance with the filing and service requirements set forth in Section IX.5 herein on a semi-annual basis, with the first such report to be submitted within six (6) months after the Closing Date. Each such report will include the following:
  - a. a description, including any terms and conditions, of any data caps or usage-based pricing mechanism proposed to any of the Company's Executive Officers or Directors, or planned by the Company; and

<sup>&</sup>lt;sup>10</sup> For avoidance of doubt, nothing in this Section IV shall be construed to prevent the Company from taking any action consistent with reasonable network management or to comply with the requirements under the Digital Millennium Copyright Act.

b. any other reasonable information the Independent Compliance Officer determines is reasonably necessary to report as required by this Condition.

(App'x B § IV.)

#### **B. OBSERVATIONS**

On November 16, 2016, Charter filed a report concerning its compliance with the Data Caps Condition (the "Data Cap Report"). The November 16, 2016 report provides all information required by the Condition. Among other things, the Report states that Charter is in full compliance with the Condition, that the imposition of data caps and/or usage based pricing for broadband is inconsistent with its business model, and that it "has taken appropriate steps to confirm that all senior executives with the authority to propose or approve the imposition of data caps and/or usage-based pricing plans are aware of both the Condition and the obligation to include any proposals of data caps or usage-based pricing mechanisms in the semi-annual reports filed with the Commission." (Data Cap Report, at 2.) The Report further confirms that "[d]uring the period covered by this report, there have been no proposals made to any of Charter's Executive Officers or Directors to use either data caps or usage-based pricing mechanisms in conjunction with any fixed mass market BIAS plans." (Id.)

## 1. Pre-Merger Usage-Based Pricing

The ICO is not aware of the use of pre-merger data caps or usage-based pricing by

Legacy Charter or Legacy Bright House. Legacy TWC, however, offered certain customers a

usage-based pricing package called "Essentials Internet" that provided customers a discounted

broadband price if their monthly data use fell at or below a certain gigabyte threshold. Essentials

Internet is a type of usage-based pricing that is prohibited by the Data Cap Condition. It appears
to have been eliminated by Charter following the merger.

## 2. Steps to Confirm Compliance

The ICO has taken several steps to confirm Charter's compliance with the Data Caps

Condition. The ICO has reviewed documents provided by Charter showing that the Essentials

Internet programs were discontinued at the direction of President and COO John Bickham on or
about June 1, 2016. The ICO also reviewed marketing and training materials provided by

Charter showing that the Company's internet services are advertised and marketed as featuring
no data caps. The ICO was also provided with minutes of the September 12, 2016 ESC

meeting and the September 23, 2016 and October 17, 2016 OSC meetings, which state—albeit in
one sentence—that there were no data cap or usage-based pricing proposals presented to

Charter's executive officers or directors, or planned by the company.

In addition, the ICO has conducted several interviews of senior marketing and pricing executives who are responsible for the development and implementation of all of Charter's residential offerings. [BEGIN HIGHLY CONFIDENTIAL INFORMATION]

**END** 

HIGHLY CONFIDENTIAL INFORMATION] Each confirmed not only that the Essentials Internet program had been discontinued, but that Charter currently imposes no data caps or usage-based pricing on its customers.

The ICO also explored whether, notwithstanding that Charter's offered plans do not feature data caps, the Company imposes such caps or other limitations on internet use through

<sup>&</sup>lt;sup>11</sup> Charter's advertising concerning data caps itself provides a measure of ensuring compliance with the Data Cap Condition, as falsely promoting the absence of data caps could result in violations of, among other things, the Federal Trade Commission's truth-in-advertising laws and regulations.

the application of its acceptable use policies ("AUPs"). Charter's AUPs prohibit, among other things, "[e]xcessive use of bandwidth, that in Charter's sole opinion, places an unusually large burden on the network or is deemed by Charter to be above normal usage. Charter has the right to impose limits on excessive bandwidth consumption via any means available to Charter."<sup>12</sup> The ICO was concerned that Charter could use the AUPs as a means to circumvent the Data Caps Condition and impose data caps on customers who, in Charter's opinion, consume excessive bandwidth. Accordingly, the ICO requested an interview with the employee responsible for the application of the AUPs, and on December 21, 2016, spoke to [BEGIN HIGHLY CONFIDENTIAL INFORMATION]

## [END HIGHLY CONFIDENTIAL INFORMATION] 13

## C. RECOMMENDATIONS

To provide a smooth process going forward, the ICO recommends that Charter create additional documentation of whether, on an ongoing basis, any data cap or usage-based pricing proposals are presented to Charter's Executive Officers or Directors, or planned by the Company. Accordingly, the ICO recommends that Charter seek written periodic certifications from its executive officers and directors that no data caps or usage based pricing plans have been proposed or planned by the Company.

<sup>&</sup>lt;sup>12</sup> See https://www.charter.com/browse/content/policies-comm-acceptable-use (last visited Jan. 23, 2017).

<sup>&</sup>lt;sup>13</sup> A DDoS attack "uses many computers and many internet connections to flood a targeted server or network resource with requests, or packets of information, rendering it unavailable to users, or in some cases crashing the network." *Financial Times*, <a href="http://lexicon.ft.com/Term?term=distributed-denial-of-service-DDoS">http://lexicon.ft.com/Term?term=distributed-denial-of-service-DDoS</a> (last visited Jan. 23, 2017).

## III. INTERCONNECTION CONDITION

#### A. STATEMENT OF THE CONDITION

1. <u>Introduction</u>. This Condition ensures that the Company will fulfill Charter's commitment to offer interconnection between its IP network and other large IP networks, including backbone Internet providers, content delivery networks (CDNs), and edge providers. After a thorough review of the record, we find that the transaction will likely increase edge providers' interconnection costs, and New Charter will gain the ability to harm online video distributors. In order to protect edge providers from transaction-specific harms we adopt this Condition. We further find that granting the Application subject to the interconnection-specific Condition set forth here, which renders the Applicants' commitments meaningful and enforceable, is in the public interest.

#### 2. Conditions.

- a. Commencing on the Closing Date, and ending on the seventh anniversary of the Closing Date, or as otherwise adjusted by the Commission under the terms of this Appendix B, the Company shall enter into an Interconnection Agreement consistent with the terms set forth in Attachment 1 with any Person that qualifies under the terms of Attachment 1.
- b. The Company shall post Attachment 1 on a publicly accessible webpage, available without charge to a Person viewing it, associated with its networks operations group.
- c. <u>Individual Contracting.</u> Nothing in this Condition precludes the Company and a Person from voluntarily entering into an Interconnection Agreement with different terms than elaborated in this Condition. However, any such Interconnection Agreement with a Person that qualifies under the terms set forth in Attachment 1 shall:
  - i. Not contain terms that are materially less favorable to the Interconnection Party than the correlating terms set forth in Attachment 1;
  - ii. Not lower the data transfer growth rates specified in the "Suspension" portion of Attachment 1 (i.e., "10% or more in any calendar month compared to any prior calendar month; or at least 8% per month over a rolling 6 month period; or 5.9% over a rolling 6 month period for a company whose traffic constitutes 30% or more of the total traffic in the dominant direction on New Charter's Network");
  - iii. Permit "any portion of that incremental traffic that was previously being delivered to New Charter by third parties" to be exempt from calculating the data transfer growth rate, including the rates in the "Suspension" portion of Attachment 1, and permit that in the event that the Interconnection Party begins conveying data to or from New Charter that was previously conveyed to or from New Charter by a

- third party, the parties shall account for this additional data transfer as the Interconnecting Party's own for the purposes of measuring growth rates during subsequent measuring periods; and
- iv. Not limit the relief available to the Interconnection Party in the event of a breach, except that an Interconnection Agreement may include standard contractual provisions limiting the types of damages available for breach of contract (e.g., by limiting the availability of consequential, incidental, general, indirect, or punitive damages).
- d. <u>Points of Presence</u>. The Company may designate additional Points of Presence, but shall not remove any Points of Presence from the list contained in Attachment 1.

### e. Enforcement.

- i. Any Person seeking an Interconnection Agreement with the Company who is aggrieved by a failure by the Company to comply with this Condition, including the terms of Attachment 1, may seek redress from the Commission.<sup>14</sup>
- ii. In the event that a dispute arises between the parties to an Interconnection Agreement to a contract entered into pursuant and subject to this Condition, that dispute shall be addressed to a court of competent jurisdiction or as otherwise provided in said Agreement.
- 3. Reporting. Within ninety (90) days after the Closing Date, and quarterly thereafter, the Company shall submit until the seventh anniversary of the Closing Date, or as otherwise adjusted by the Commission under the terms of this Appendix B, ("Interconnection Reporting Period") a detailed report that sets forth the following information:
  - a. All Interconnection Parties that have reached Interconnection Agreements with the Company under the terms of this Condition;
  - b. Information for each Interconnect Exchange Point, which shall include, as of the date that is the last day of the calendar quarter preceding the Report:
    - i. Each Interconnection Party interconnected with the Company at that Interconnect Exchange Point;
    - ii. For each Interconnection Party, the aggregate link capacity between the Company and each Interconnection Party at that Interconnect Exchange Point;

<sup>&</sup>lt;sup>14</sup> For example, Persons seeking redress may file with the Commission a Petition for Declaratory Ruling pursuant to 47 CFR § 1.2 or a Section 208 formal complaint pursuant to 47 CFR §§ 1.720-1.736, as appropriate. There may also be instances where Persons may avail themselves of the Open Internet procedures for formal complaints, 47 CFR §§ 8.12-8.17, which govern, *inter alia*, certain Internet traffic exchange disputes (see Protecting and Promoting the Open Internet, Report and Order on Remand, Declaratory Ruling, and Order, 30 FCC Rcd 5601, 5713 para. 252 (2015)).

- iii. For each Interconnection Party, traffic exchange, in each direction, as measured by the 95<sup>th</sup> percentile method; and
- iv. For each port through which traffic is exchanged with an Interconnection Party, the percentage time within the reporting period that the port was over 75% capacity in the dominant direction.
- c. Reports shall be filed in machine readable format, and shall include, at a minimum, the following information, in a similar format as shown below:

Chicago POP		
Interconnection Party A: 10G (Jan. 1, 2015 to Mar. 30, 2015)		
Month	Upstream	Downstream
Jan. 2015	1.53 Gbps	5.71 Gbps
Feb. 2015	1.62 Gbps	5.92 Gbps
Mar. 2015	1.75 Gbps	6.17 Gbps
Interconnection Party B: 240 G (Jan. 1, 2015 to Mar. 15, 2015)		
300 G (Mar. 16, 2015 to Mar. 30, 2015)		
Month	Upstream	Downstream
Jan. 2015	2.53 Gbps	165.5 Gbps
Feb. 2015	3.27 Gbps	175.2 Gbps
Mar. 2015	3.41 Gbps	180.3 Gbps

- d. In addition, for the duration of the Interconnection Reporting Period, the Company shall submit annually to the Commission's Office of General Counsel a report from the Independent Compliance Officer addressing whether the Company has complied with this Condition. The first such report shall be submitted no later than ninety (90) days after the date that is one year after the Closing Date.
- 4. <u>Disclosure of Internet Interconnection Agreements.</u> Commencing on the Closing Date and ending on the seventh anniversary, or as otherwise adjusted by the Commission under the terms of this Appendix B, that date, absent any extension under the terms of this Appendix B, the Company shall comply with the following:
  - a. The Company shall submit all Interconnection Agreements within thirty (30) days of execution, in accordance with the filing and service requirements set forth in Section IX.5 herein, entered for the exchange of Internet traffic, between the Company's network that carries Broadband Internet Access Service traffic and the Interconnection Party, at Interconnect Exchange Points located within the United States, unless the aggregate capacity of the interconnection links between the Company and an Interconnection Party is less than 30 Gbps.
  - b. Within thirty (30) days of the Closing Date, in accordance with the filing and service requirements set forth in Section IX.5 herein, the Company shall submit all existing agreements for the exchange of traffic, between the Company's network that carries Broadband Internet Access Service traffic and an Interconnection Party, at Interconnect Exchange Points located within

the United States, unless the aggregate capacity of the interconnection links between the Company and an Interconnection Party is less than 30 Gbps.

(App'x B § III.)

### **B. OBSERVATIONS**

### 1. Background

In this Report the ICO sets forth observations specific to Charter's third and fourth quarter reports regarding the exchange of traffic between Charter's network and interconnection parties, filed with the FCC on October 14, 2016 (the "Third Quarter Report") and January 11, 2017 (the "Fourth Quarter Report"). (See App'x B § III(3).) The ICO will provide an in-depth evaluation of Charter's compliance with the Interconnection Condition more generally in the ICO's first annual report regarding the Interconnection Condition, due to be filed on August 16, 2017. In order to provide context for the ICO's observations and recommendations regarding the Third and Fourth Quarter Reports, however, the ICO begins by providing a brief overview of Charter's approach to satisfying the Interconnection Condition.

### 2. Charter's Approach to Satisfying the Condition

Charter has identified [BEGIN HIGHLY CONFIDENTIAL

INFORMATION] [END HIGHLY CONFIDENTIAL INFORMATION] key employees other than the CCO with primary responsibility for ensuring Charter's compliance with the Interconnection Condition. They are: [BEGIN HIGHLY CONFIDENTIAL

**INFORMATION**]

### [END HIGHLY CONFIDENTIAL INFORMATION]

Charter has informed the ICO that to bring the Company into compliance with the Condition, [BEGIN HIGHLY CONFIDENTIAL INFORMATION]

### [END HIGHLY CONFIDENTIAL INFORMATION] Invoices

produced by Charter and reviewed by the ICO confirm that to be the case. Additionally, Charter has composed an interconnection policy to govern its interconnection agreements based on the terms of Attachment 1 to the Merger Order. (See App'x B §§ III(2)(a)-(b).) That policy is publicly posted at <a href="www.charter.com/browse/content/ip-interconnection">www.charter.com/browse/content/ip-interconnection</a> and has been reviewed by the ICO. Charter has also established the email address <a href="interconnection@charter.com">interconnection@charter.com</a> that counterparties can use to submit applications for settlement-free interconnection, and the ICO has reviewed emails submitted to that address. (See App'x B, Attachment 1.) Finally, Charter has developed internal procedures to ensure that all interconnection agreements are filed with the FCC and that quarterly reports of Interconnect Exchange Point data are generated as required by the Condition. (See App'x B §§ III(3)-(4).)

[END HIGHLY CONFIDENTIAL INFORMATION]

<sup>15 [</sup>BEGIN HIGHLY CONFIDENTIAL INFORMATION]

### 3. Charter's Third and Fourth Quarter Reports

### a. Process for Creating the Reports

The ICO's understanding regarding Charter's process for creating the Interconnect Exchange Point quarterly reports, including the Third and Fourth Quarter Reports, is as follows.

The source data Charter uses to generate the quarterly reports is the same data that Charter uses in the normal course of its business. [BEGIN HIGHLY CONFIDENTIAL INFORMATION]

[END

### **HIGHLY CONFIDENTIAL INFORMATION**]

To assemble the quarterly reports, Charter pulls information from the network data and uses the same software that it uses to track its network data.<sup>16</sup> The process is straightforward:

### [BEGIN HIGHLY CONFIDENTIAL INFORMATION]

[END

HIGHLY CONFIDENTIAL INFORMATION] (See App'x B §§ III(3)(a)-(c).)

[END HIGHLY CONFIDENTIAL

**INFORMATION** 

<sup>16 [</sup>BEGIN HIGHLY CONFIDENTIAL INFORMATION]

To generate the Third and Fourth Quarter Reports, Charter followed precisely this procedure. [BEGIN HIGHLY CONFIDENTIAL INFORMATION]

### [END HIGHLY CONFIDENTIAL INFORMATION]

### b. Contents of the Reports

The Third and Fourth Quarter Reports include all the information required by the Interconnection Condition. (*See* App'x B § III(3).) The counterparties corresponding to each Interconnect Exchange Point are listed on both the "Summary" and "Utilization" sheets of the Reports. "Aggregate link capacity between the Company and each Interconnection Party at that Interconnect Exchange Point" is listed next to the identity of each Interconnection Party on the Summary sheet. The Summary sheet also provides the aggregate traffic exchanged in each direction (upstream and downstream), measured by the 95th percentile method.<sup>17</sup> Finally, the Utilization sheet displays the percentage of time within the reporting period that each port was over 75% capacity in the dominant direction. To arrive at the 75% capacity figure, [BEGIN HIGHLY CONFIDENTIAL INFORMATION]

<sup>&</sup>lt;sup>17</sup> [BEGIN HIGHLY CONFIDENTIAL INFORMATION]
[END HIGHLY CONFIDENTIAL INFORMATION]

### **[END HIGHLY CONFIDENTIAL**

### **INFORMATION**]

### c. Overall Assessment of the Third and Fourth Quarter Reports

As noted above, the ICO continues to assess the reliability of Charter's network data, but at this time the ICO is confident that the Third and Fourth Quarter Reports are sufficiently accurate to comply with the Condition. First, the data and software program used to generate the Third Quarter Report is the same data and software the Circuit Operations Group uses every day to monitor the Company's networks. The accuracy of such data is necessary for Charter properly to maintain and manage its network, which is critical to Charter's ability to deliver consistent service to its customers. Second, Charter tests the accuracy of servers that measure network data in connection with software updates and the installation of new servers. Third, it seems likely that interconnection counterparties would raise concerns with Charter and/or the FCC if they were experiencing congestion-related problems such as network irregularity, slowdowns, or disruptions. The ICO is not aware of any such complaints.

It is worth noting that in reviewing the Third and Fourth Quarter Reports the ICO observed [BEGIN HIGHLY CONFIDENTIAL INFORMATION]

**[END HIGHLY CONFIDENTIAL INFORMATION]** The ICO will continue to monitor these and similar port readings in Charter's subsequent quarterly reports.

### C. RECOMMENDATIONS

The ICO does not make any recommendations with respect to Charter's quarterly interconnection reports. As explained above, the ICO is due to file a report on Charter's overall compliance with the Interconnection Condition in August 2017. The ICO will include her recommendations, if any, with respect to the Interconnection Condition generally in that report.

### **SUMMARY OF RECOMMENDATIONS**

The ICO's recommendations with respect to the Build-Out and Data Caps Conditions are listed below. The ICO has two primary overarching concerns: documentation and resources. Although Charter is in compliance with the Merger Order (with the exception of the two Build-Out reporting requirements), going forward Charter should (1) provide greater documentation of its compliance—that is, more evidence showing that it is complying with the Conditions and setting forth the steps it is taking to ensure compliance—and (2) devote greater resources to the project as the ICO begins field testing.

### **Build-Out**

- Work closely with the ICO to address the issue of the node data being reported.
- [BEGIN HIGHLY CONFIDENTIAL INFORMATION]
  [END HIGHLY CONFIDENTIAL INFORMATION]
- Be prepared to devote additional resources to satisfaction of the Condition to assist the ICO with field tests.

### Data Caps

• Seek written periodic certifications from its executive officers and directors that no data caps or usage based pricing plans have been proposed or planned by the Company.

### Exhibit A

### Exhibit B